

## Penile Length: A Study in Iranian Military Soldiers

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### Abstract

**Background & Objective:** Penile size is of great importance between some men and they are looking for a longer penis. The number of urologists visiting for complaining about short penis is increasing. Therefore, providing a definition of normal penis size can help Iranian physicians and patients.

**Methods:** This study was performed as a cross-sectional descriptive study in 1396-97 at Imam Sajjad Hospital in Tehran. In this study, simple random sampling of 500 soldiers referred to the urology department of Imam Sajjad Hospital. Data were collected by urologists. After collecting the data, it entered the spss21 for analysis.

**Results:** Our study on Iranian military soldiers consisting of all provinces showed that mean penile flaccid length is 7.87 cm, stretched length is 12.22cm and mid shaft circumference is 8.49 cm. Differences among provinces were not significant. There was no association between age and height with penile parameters.

**Conclusions:** Our study shows that in Iranian soldiers from every province, there was no significant penile parameter differences nor significant correlation with their height and age. These data may help urologists to reassure and inform men who are concerned about their penile size.

**Keywords:** Penile length, Penis circumference, Age, Height

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## مطالعه پارامترهای آلت تناسلی در ۵۰۰ سرباز ایرانی

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## چکیده

## اطلاعات مقاله

**زمینه و هدف:** اندازه آلت تناسلی در میان برخی از مردان اهمیت زیادی دارد و به همین دلیل آنان در پی بزرگتر کردن اندازه آلت خود هستند. این در حالیست که ویزیت ارولوژیست‌ها برای شکایت از آلت کوچکتر رو به افزایش است. لذا ارائه تعریفی از اندازه‌های نرمال پنیس می‌تواند به پزشکان و بیماران ایرانی کمک نماید.

**مواد و روش‌ها:** مطالعه حاضر بصورت توصیفی مقطعی در سال ۱۳۹۷-۹۶ در بیمارستان امام سجاد تهران انجام شد. در این مطالعه نمونه‌گیری بصورت تصادفی ساده از ۵۰۰ سرباز مراجعه کننده به بخش ارولوژی بیمارستان امام سجاد می‌باشد. جمع آوری داده‌ها توسط متخصص ارولوژی صورت گرفت. داده‌ها پس از جمع آوری برای تحلیل وارد نرم افزار spss ۲۱ شد.

**یافته‌ها:** مطالعه ما روی سربازان ایرانی از همه استان‌ها نشان داد که طول آلت تناسلی در حالت شل ۷/۸۷ سانتی‌متر و در حالت کشیده ۱۲/۲۲ سانتی‌متر و محیط آن در میانه پنیس ۸/۴۹ سانتی‌متر است. تفاوت در اندازه پنیس در استان‌های مختلف معنی‌دار نبود و سن و قد سربازان با اندازه آلت‌شان ارتباط نداشت.

**نتیجه‌گیری:** مطالعه ما نشان میدهد که در سربازان ایرانی از نظر اندازه آلت تناسلی در استانهای مختلف و ارتباط آن با قد و وزن شان تفاوت معنی داری وجود ندارد. این آمار شاید به ارولوژیست‌ها در اطمینان دادن به جوانان و بیماران نگران از اندازه پنیس کمک کند.

**واژه‌های کلیدی:** طول آلت تناسلی، محیط آلت تناسلی، ارتباط اندازه پنیس با سن و قد

## تاریخچه مقاله

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برای دانلود این مقاله،  
کد زیر را با موبایل خود  
اسکن کنید.



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## Introduction

Penile size is of great importance for male patients, but few high-quality data exists on this subject in Iran, particularly in different ethnic groups [1, 2]. The exact measurement of penile parameters are most important in diagnosing penile problems such as micropenis [3].

Desire for a longer penile size was a concern for 68.3% of 200 men in one study, so it is a common concern in the male population [4, 5]. Concerns about penile size affect men's sexual satisfaction and functioning [6]. Penile size does not affect sexual functions like orgasm, sexual drive, or pain experience. However, men who are less satisfied with their penis, report more sexual health problems [7]. However, penile length is normal in most men seeking penile lengthening procedures [4]. Accurate regional penile assessment and informing the men and the couples of that region about common penile dimensions may increase their sexual satisfaction. In this study 500 soldiers enrolled from all provinces of Iran. This study aimed to assess the penile parameters in healthy Iranian soldiers, to estimate the penile sizes in physically normal males younger than 30 years old, as well as to correlate the resulting values with age, height and ethnicity, to provide data that could be clinically applicable by the practicing urologists.

## Materials and Methods

This study was performed as a cross-sectional descriptive study in 1396-97 at Imam Sajjad Hospital in Tehran. In this study, simple random sampling of 500 soldiers referred to the urology department of Imam Sajjad Hospital. In this study 500 soldiers (mean age 22.4; range 18-32) presented to our urologic outpatient clinic in a military Hospital. Exclusion criteria included, complaint of small or short penis, Peyronie's disease, congenital curvature, clinical hypogonadism and previous penile surgery or trauma. Data were collected by urologists.

Ruler measurement of flaccid and stretched penis and tape measurement of flaccid penile

circumference and soldiers' height were made in centimeters with a decimal point. To measure the total penile length. We placed the butt of a rigid ruler on the pubic skin over the dorsum of the penis in flaccid and stretched conditions. The distance between the pubic skin and the external urethral meatus was recorded. The penile circumference or girth was measured at the midshaft. The height was measured as routine. The resultant values were matched with the age, height and ethnicity.

The examination room was quiet, comforting, and with the temperature between 20°C and 25°C to alleviate any anxiety and to permit relaxation of the external genitalia. After collecting the data, it entered the spss21 for analysis.

## Results

Our study was conducted on a group of Iranian military soldiers consisting of almost all provinces included 500 men with mean age of 22.57 y/o ranging from 18 y/o to 35 y/o. Their mean height was 176.93 cm ranging from 152cm to 195cm.

The mean penile flaccid length was  $7.87 \pm 1.45$  cm, stretched length was  $12.22 \pm 2.43$  cm and mid shaft circumference was  $8.49 \pm .76$  cm. Differences among provinces were not statistically significant (Table 1).

In addition, we did not find any correlation among penile flaccid and stretched length and circumference.

There were no association between soldiers' height and penile parameters. Also, we did not find any significant correlation between age and penile parameters in this group of soldiers.

Table 1. Penile length in Flaccid and Stretched situations and penile flaccid mid shaft circumference in different cities of Iran

City		Flaccid	Stretched	Circumference
Ardabil	Mean	7.477	11.737	8.384
	N	43	43	43
	Variance	1.379	2.329	833.
Markazi	Mean	8.300	12.253	8.513
	N	15	15	15
	Variance	1.130	2.147	403.
Kermanshah	Mean	8.529	13.386	8.843
	N	7	7	7
	Variance	2.322	4.691	1.346
Lorestan	Mean	7.365	12.165	8.395
	N	20	20	20
	Variance	2.353	3.519	854.
Sistan baluchestan	Mean	8.400	11.950	8.450
	N	4	4	4
	Variance	4.047	3.777	150.
Hamadan	Mean	8.070	12.391	8.500
	N	23	23	22
	Variance	2.293	3.143	569.
Isfahan	Mean	7.814	12.300	8.657
	N	7	7	7
	Variance	251.	563.	790.
Ilam	Mean	8.260	13.140	8.800
	N	5	5	5
	Variance	1.413	898.	1.690
Qazvin	Mean	8.019	12.530	8.681
	N	27	27	27
	Variance	1.332	2.849	615.
Kohkiluyebayerahmad	Mean	7.967	11.467	8.067
	N	3	3	3
	Variance	0.003	173.	0.143
Fars	Mean	7.717	12.083	8.367
	N	6	6	6
	Variance	0.602	1.642	1.259
Azarbaijan Sharghi	Mean	8.079	12.693	8.857
	N	28	28	28
	Variance	1.368	1.621	988.
Hormozgan	Mean	8.525	12.875	8.050
	N	4	4	4
	Variance	0.302	1.063	0.437

City		Flaccid	Stretched	Circumference
Khorasan	Mean	7.500	11.950	8.600
	N	8	8	8
	Variance	1.429	6.166	0.880
Alborz	Mean	8.041	12.255	8.645
	N	22	22	22
	Variance	1.213	2.560	0.568
Qom	Mean	7.386	11.386	8.257
	N	7	7	7
	Variance	1.051	1.241	0.226
Khuzestan	Mean	8.300	12.383	8.267
	N	6	6	6
	Variance	2.140	1.982	0.591
Kerman	Mean	9.025	13.225	8.500
	N	4	4	4
	Variance	1.642	9.149	0.620
Semnan	Mean	7.625	12.225	8.700
	N	4	4	4
	Variance	1.576	4.203	0.927
Chaharmahalbakhtiari	Mean	7.775	13.100	8.338
	N	8	8	8
	Variance	0.962	3.383	0.251
Yazd	Mean	7.900	12.700	8.850
	N	4	4	4
	Variance	1.773	1.827	0.870
Bushehr	Mean	8.300	12.167	8.133
	N	3	3	3
	Variance	0.010	143.	0.143
Azarbaijan Gharbi	Mean	8.139	12.278	8.461
	N	18	18	18
	Variance	1.760	1.859	1.495
Kurdistan	Mean	8.100	12.400	8.360
	N	10	10	10
	Variance	0.544	1.656	1.178
Tehran	Mean	7.795	12.079	8.494
	N	138	138	138
	Variance	1.404	2.472	0.724
Gilan	Mean	7.673	12.127	8.273
	N	26	26	26
	Variance	1.406	1.801	0.612

City		Flaccid	Stretched	Circumference
Mazandaran	Mean	7.671	12.136	8.114
	N	14	14	14
	Variance	1.107	2.253	0.984
Golestan	Mean	8.287	12.760	8.540
	N	15	15	15
	Variance	1.647	1.964	0.978
Zanjan	Mean	7.591	11.273	8.818
	N	11	11	11
	Variance	1.891	970.	918.
Total	Mean	7.871	12.220	8.499
	N	490	490	489
	Variance	1.458	2.438	0.764

## Discussion

There are many young men consulting with urologist about their penile size that may even direct them to penile lengthening operation. However, urologists should be aware of the psychological background of such patients, as some patients may have hidden psychological problems. There are problems that cannot be relieved by surgery alone [8]. On the other hand, in our country, physicians do not have reliable data about penile parameters to refer especially in different ethnicity. Almost all of the reports are from other countries and races.

Our study has been performed prospectively on a group of military soldiers from every region of Iran then it can be a reliable Iranian standard of penile parameters in young men ranging from 18 to 32 years old. In this study, we only measured the penile dimensions in the flaccid and stretched state. In our Islamic country owing to ethical concerns and religious beliefs, we could not measure penile parameters in erect state. In one study, men have measured their penile length by themselves, however, this measurement may be inaccurate [9]. However, it is evident that stretched penile length is dependent upon factors like the stretching force or number of stretching. To prevent these problems, one researcher measured all penile lengths with a maximal constant stretching force at one attempt. However, some studies showed that

stretched penile measurement offers a good alternative to erect and flaccid penile length measurements [10-13].

Penile flaccid length in our study is similar with an Indian study but penile stretched length and circumference were significantly longer and thinner [14]. Comparing the results of the study by Khan S. et al. in the UK to our findings, British men have longer penis than men in Iran. The mean values of flaccid and stretched penis in British men are 8.7 cm and 14.3 cm compared to 7.8 cm and 12.2 cm in Iranian men [15]. Our data showed that penile parameters had no significant association with height or age of the studied group. Although in a systematic review by Veale D. et al. there is a significant correlation between penile flaccid stretched or erect length with height [16]. The soldiers were asked about their penile size before the study and usually their estimations were more than the truth. But regarding to soldiers fearing of sexual behavior (penile dysmorphophobia) [15], penile calculating was less than the truth. The data confirmed the results of previous studies where young men tended to underestimate their penile size [8, 12]. Therefore, we have to raise general information about usual penile size in young men of our country to lessen their agitation and then vain urologic office referral. Those who think that they have a small penis are anxious, apprehen-

sive, and with a wide variety of fears. They tend to make minor problems to major sources of concern and dissatisfaction [8]. In addition, they are likely to show excessive concerns over their body functions, especially in the circulatory, digestive or urinary organs [8]. As penile size is dependent on androgens and testicular size, we excluded any unhealthy man regarding testis and breast examination and body hair pattern.

The definition of normal penile size has become an interest in performing correct assessments and therapeutic choices in patients who are concerned about penile parameters. A man's self-esteem can be affected by his penile parameters, mainly penile size [2]. If a man thinks his penis is inadequate, negative feelings would intervene his relation with his sexual partner [8]. Seeking for penile augmentation in different countries is increasing [2]. However, penile augmentation seems to be in its experimental period and its indications have not yet been clearly established and it is accompanied with many complications [8]. It has been suggested that just men with an erected length of less than 10 cm might be difficult for penetrance but stretched length of less than 7.5 cm should be candidates of penile lengthening [10]. However, patients may not be satisfied after these surgeries [17]. Two and half standard deviation below mean penile size is assumed as micropenis [18]. Although pediatric micropenis could be corrected with hormonal therapy, adult micropenis treatment is challenging [19]. Penile mechanical extenders, prepubic fat excision and suspensory ligament division are available options [20].

If penile length in erected form be less than 10 cm, penetration might be troublesome, however shorter than 7.5 cm in stretched form should be candidate to penile lengthening procedures [10].

## Conclusion

Mean flaccid length of Iranian soldiers' penis is 7.87cm and flaccid stretched length is 12.22cm and mid shaft flaccid circumference is 8.49 cm. Penile parameters have no significant correlation

with soldiers' height and age more than 18 y/old. So, these data can be used by both physicians and people to reach a better determination.

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## Conflict of Interest

The authors declared no conflict of interest regarding publication of this paper.

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